

This listing of claims will replace all prior versions, and listings, of claims in the application:

The Status of the Claims

1. (Currently Amended) A method of securely configuring a first machine in a pre-operating system environment, the method comprising:

detecting a message;

determining an operating mode of the first machine;

providing an attestation while the first machine is operating in the pre-operating system environment for use by a second machine to determine whether to send a configuration update to the first machine;

performing a shared secret key exchange;

receiving a receiving the configuration update when the second machine determines that the attestation is authentic; and
updating a machine configuration in a pre-operating system environment.

2. (Currently Amended) A method as defined in claim 1, wherein the message is sent from a from a second machine.

3. (Currently Amended) A method as defined in claim 1, wherein the operating mode of the first machine comprises at least one of an IT-managed machine and a or a consumer machine.

4. (Currently Amended) A method as defined in claim 1, wherein the attestation comprises at least one of machine identity information and/or a pseudo-anonymous authentication.

5. (Original) A method as defined in claim 4, wherein the pseudo-anonymous authentication is provided by a trusted platform module.

6. (Currently Amended) A method as defined in claim 4, wherein the machine identity information comprises at least one of a serial number, a network name, and a or a cryptographic representation of hardware registers.

7. (Original) A method as defined in claim 4, wherein the pseudo-anonymous authentication comprises an Attestation Identity Key.

8. (Original) A method as defined in claim 1, wherein updating the machine configuration in a pre-operating system environment is adapted to operate in an OS-transparent operating mode with networking support.

9. (Currently Amended) A method of securely ~~configuring~~
conveying a configuration update to a client machine operating in a pre-
operating system environment, the method comprising:

sending a message to the client machine to determine whether
the client machine supports receiving configuration updates from a remote
source while the client machine is operating in the pre-operating system
environment;

determining an operating mode of the client machine;
receiving an attestation from the client machine;
verifying the attestation;
performing a shared secret key exchange; and
sending a configuration update to the client machine in a pre-
operating system environment.

10. (Currently Amended) A method as defined in claim 9, wherein
the message is ~~to~~ a sent to the client machine.

11. (Currently Amended) A method as defined in claim 9, wherein
the operating mode of the client machine comprises at least one of an IT-
managed device ~~and a~~ or a personal device.

12. (Currently Amended) A method as defined in claim 9, wherein
the attestation comprises at least one of client machine identity information
~~and a~~ or a pseudo-anonymous authentication.

13. (Currently Amended) A method as defined in claim 12, wherein the client machine identity information comprises at least one of a serial number, a network name, and a or a cryptographic representation of hardware registers.

14. (Original) A method as defined in claim 12, wherein the pseudo-anonymous authentication comprises an Attestation Identity Key.

15. (Original) A method as defined in claim 9, wherein the attestation is verified by a trusted third party.

16. (Currently Amended) A method as defined in claim 9, wherein the configuration comprises at least one of a firmware setting, a BIOS setting, and a or a machine setting.

17. (Original) A method as defined in claim 16, wherein the configuration update comprises an encrypted configuration update.

18. (Original) A method as defined in claim 9, wherein sending the configuration update to the client machine in a pre-operating system environment is adapted to operate in an OS-transparent operating mode with networking support.

19. (Currently Amended) An apparatus to securely configure a client machine in a pre-operating system environment, the apparatus comprising:

a client machine comprising:

a first messaging module configured to detect messages and send messages;

an operating mode;

a trusted platform module configured to provide an attestation while the client machine is operating in the pre-operating system environment for use by a server machine to determine whether to send a client configuration update to the client machine;

a first key exchange module configured to perform a shared secret key exchange; and

a configuration module configured to update the client's configuration in a pre-operating system environment; and

a-server-the server machine comprising:

a second an-messaging module configured to send messages and receive messages for use in sending a message to the client machine to determine whether the client machine supports receiving configuration updates from the server machine while the client machine is operating in the pre-operating system environment;

a second key exchange module configured to perform a shared secret key exchange after an attestation has been verified; and

an update module configured to generate a-generate the

client configuration update.

20. (Currently Amended) An apparatus as defined in claim 19, wherein the client machine's operating mode comprises at least one of an IT-managed machine ~~and a~~ or a consumer machine.

21. (Currently Amended) An apparatus as defined in claim 19, wherein the trusted platform module is configured to use at least one of a pseudo-anonymous authentication ~~and~~ or machine identity information.

22. (Currently Amended) An apparatus as defined in claim 19, wherein the configuration module is configured to update at least one of a firmware setting, a BIOS setting, ~~and a~~ or a machine setting.

23. (Original) An apparatus as defined in claim 19, wherein the configuration module is adapted to update the client's configuration in an OS-transparent operating mode with networking support.

24. (Currently Amended) An apparatus as defined in claim 19, wherein the update module is configured to generate at least one of a firmware update, a BIOS update, ~~and a~~ or a machine setting update.

25. (Original) An apparatus as defined in claim 19, wherein the server machine further comprises an encryption module configured to encrypt the client configuration update.

26. (Currently Amended) A machine readable medium having instructions stored thereon that, when executed, cause a machine to:

detect a message;
determine an operating mode of the machine;
provide an attestation while the machine is operating in a pre-operating system environment for use by a server to determine whether to send a configuration update to the machine;
perform a shared secret key exchange;
~~receive a receive the configuration update when the server determines that the attestation is authentic; and~~
update a machine configuration ~~in-a-~~in the pre-operating system environment.

27. (Currently Amended) A machine readable medium as defined in claim 26, having instructions stored thereon that, when executed, cause the machine to receive the message from-a-serverthe server.

28. (Currently Amended) A machine readable medium as defined in claim 26, having instructions stored thereon that, when executed, cause the machine to update at least one of a firmware setting, a BIOS setting, ~~and a or a~~ machine setting.

29. (Currently Amended) A machine readable medium having instructions stored thereon that, when executed, cause a first machine to:

send a message to a client machine to determine whether the client machine supports receiving configuration updates from a remote source while the client machine is operating in a pre-operating system environment;

determine an operating mode of a second;

receive an attestation from the client machine;

verify the attestation;

perform a shared secret key exchange; and

send a configuration update to the client machine ~~in a~~ in the pre-operating system environment.

30. (Original) A machine readable medium as defined in claim 29, having instructions stored thereon that, when executed, cause the first machine to send the message via a network connection.

31. (Original) A machine readable medium as defined in claim 29, having instructions stored thereon that, when executed, cause the first machine to query a trusted third party to verify the attestation.

32. (Original) A machine readable medium as defined in claim 29, having instructions stored thereon that, when executed, cause the first machine to encrypt the configuration update.